AMENDMENTS

In the Claims

Status of Original Claims

1.(**Cancel**) A method for implementing a thermodynamic cycle comprising the steps of:

transforming thermal energy from a fully vaporized boiling stream into a usable energy form to produce a lower pressure, spent stream;

transferring thermal energy from an external heat source stream to a boiling stream to form the fully vaporized boiling stream and a cooled external heat source stream;

transferring thermal energy from the spent stream to a first portion of a heated higher pressure, basic working fluid stream to form a partially condensed spent stream and a first pre-heated, higher pressure, basic working fluid stream;

transferring thermal energy from the cooled external heat source stream to a second portion of the heated higher pressure, basic working fluid stream to form a second pre-heated, higher pressure, basic working fluid stream and a spent external heat source stream;

combining the first and second pre-heated, higher pressure basic working fluid streams to form a combined pre-heated, higher pressure basic working fluid stream;

separating the partially condensed spent stream into a separated vapor stream and a separated liquid stream;

pressurizing a first portion of the separated liquid stream to a pressure equal to a pressure of the combined pre-heated, higher pressure basic working fluid stream to form a pressurized liquid stream;

combining the pressurized liquid stream with the combined pre-heated, higher pressure basic working fluid stream to form the boiling stream;

combining a second portion of the separated liquid stream with the separated vapor stream to from a lower pressure, basic working fluid stream;

transferring thermal energy from the lower pressure, basic working fluid stream to a higher pressure, basic working fluid stream to form the heated, higher pressure, basic working fluid stream and a cooled, lower pressure, basic working fluid stream;

transferring thermal energy cooled, lower pressure, basic working fluid stream to an external coolant stream to from a spent coolant stream and a fully condensed, lower pressure, basic working fluid stream; and

pressurizing the fully condensed, lower pressure, basic working fluid stream to the higher pressure, basic working fluid stream.

2.(**Currently Amended**) The method of claim ~~1~~9, wherein the external heat source stream is a geothermal stream.

3.(**Original and Allowed**) A method for implementing a thermodynamic cycle comprising the steps of:

transforming thermal energy from a fully vaporized basic working fluid stream into a usable energy form to produce a lower pressure, spent stream;

combining the spent stream with a depressurized liquid stream to form a lower pressure mixed stream,

transferring thermal energy from the lower pressure mixed stream to a first portion of a pre heated higher pressure, basic working fluid stream to form a cooled mixed lower pressure stream and a first heated, higher pressure, basic working fluid stream;

separating the cooled mixed lower pressure stream into a separated lower pressure vapor stream and a separated lower pressure liquid stream;

mixing a first portion of the separated liquid stream with the separated vapor stream to form a second mixed lower pressure stream,

transferring thermal energy from the second mixed lower pressure stream to a higher pressure, basic working fluid stream to form a pre-heated higher pressure, basic working fluid stream and a cooled second mixed lower pressure stream,

condensing the cooled second mixed lower pressure stream with an external cooling stream to form a fully condensed lower pressure basic working fluid stream,

pressuring the fully condensed lower pressure basic working fluid stream to form a higher pressure basic working fluid stream,

transferring thermal energy from a thrice cooled external heat source stream to a second portion of the pre-heated higher pressure basic working fluid stream to form a second heated higher pressure basic working fluid stream and a spent external heat source stream,

combining the first and second heated higher pressure, basic working fluid streams to form a combined heated, higher pressure, basic working fluid stream;

transferring thermal energy from a twice cooled external heat source stream to the combined heated, higher pressure basic working fluid streams to form a hotter higher pressure basic working fluid stream and the thrice cooled external heat source stream;

combining a higher pressure separated vapor stream with the hotter higher pressure basic working fluid stream to form a mixed higher pressure stream;

transferring thermal energy from a once cooled external heat source stream to the mixed higher pressure stream to form the twice cooled external stream and a partially vaporized higher pressure stream,

separating the partially vaporized higher pressure stream into a second separated vapor higher pressure stream and a second separated higher pressure liquid stream;

transferring thermal energy from an external heat source stream to the second separated vapor higher pressure stream to form the once cooled external heat source stream and the fully vaporized basic working fluid,

reducing the pressure of the second separated higher pressure liquid stream to form a reduced pressure mixed stream;

separating the reduced pressure mixed stream into the first separated vapor stream and a first reduced pressure separated liquid stream, and

reducing the pressure of the reduced pressure separated liquid stream into the lower pressure liquid stream.

4.(**Original and Allowed**) The method of claim 3, wherein the external heat source stream is a geothermal stream.

5.(**New**) The method of claim 3, wherein the external heat source stream is a geothermal stream.

6.(**New**) The method of claim 3, wherein the working fluid comprises a lower boiling point component fluid and a higher boiling point component.

7.(**New**) The method of claim 3, wherein working fluid comprises an ammonia-water mixture, a mixture of two or more hydrocarbons, a mixture of two or more freon, a mixture of hydrocarbons and freon,

8.(New) The method of claim 3, wherein working fluid comprises a mixture of water and ammonia.

9.(New) A method for implementing a thermodynamic cycle comprising the steps of:

transforming thermal energy from a fully vaporized stream into a usable energy form to produce a lower pressure, spent stream;

transferring thermal energy from an external heat source stream to a first mixed stream to form the fully vaporized stream and a cooled external heat source stream;

transferring thermal energy from the cooled external heat source stream to a combined stream to form a cooler external heat source stream and a partially vaporized combined stream,

separating the partially vaporized combined stream into a vapor stream and a liquid stream,

combining a first portion of the liquid stream with the vapor stream to form the first mixed stream,

reducing a pressure of a second portion of the liquid stream to a pressure of the spent stream to form a lower pressure stream;

combining the lower pressure stream with the spent stream to form a mixed spent stream,

transferring thermal energy from the cooler external heat source stream to a first portion of a pre-heated, higher pressure, basic working fluid stream to form a first heated, higher pressure, basic working fluid stream and a spent external heat source stream;

transferring thermal energy from the mixed spent stream to a second portion of a pre-heated higher pressure, basic working fluid stream to form a second heated, higher pressure, basic working fluid stream and a cooled mixed spent stream;

separating the cooled mixed spent stream into a second vapor stream and a second liquid stream;

pressurizing a first portion of the second liquid stream to a pressure of the first and second heated, higher pressure basic working fluid streams to form a pressurized liquid stream;

combining the first heated, higher pressure basic working fluid streams, the second heated, higher pressure basic working fluid stream and the pressurized liquid stream to form the combined stream;

combining a second portion of the second liquid stream with the second vapor stream to from a lower pressure, basic working fluid stream;

transferring thermal energy from the lower pressure, basic working fluid stream to a liquid higher pressure, basic working fluid stream to form the pre-heated, higher pressure, basic working fluid stream and a cooled, lower pressure, basic working fluid stream;

transferring thermal energy from the cooled, lower pressure, basic working fluid stream to an external coolant stream to from a spent coolant stream and a fully condensed, lower pressure, basic working fluid stream; and

pressurizing the fully condensed, lower pressure, basic working fluid stream to form the liquid higher pressure, basic working fluid stream.

10.(**New**) The method of claim 9, wherein the external heat source stream is a geothermal stream.

11.(**New**) The method of claim 9, wherein the working fluid comprises a lower boiling point component fluid and a higher boiling point component.

12.(**New**) The method of claim 9, wherein working fluid comprises an ammonia-water mixture, a mixture of two or more hydrocarbons, a mixture of two or more freon, a mixture of hydrocarbons and freon,

13.(**New**) The method of claim 9, wherein working fluid comprises a mixture of water and ammonia.

14.(**New**) A method for implementing a thermodynamic cycle comprising the steps of:

transforming thermal energy from a fully vaporized stream into a usable energy form to produce a lower pressure, spent stream;

transferring thermal energy from an external heat source stream to a first mixed stream to form the fully vaporized stream and a cooled external heat source stream;

transferring thermal energy from the cooled external heat source stream to a combined stream to form a cooler external heat source stream and a partially vaporized combined stream,

separating the partially vaporized combined stream into a vapor stream and a liquid stream,

combining a first portion of the liquid stream with the vapor stream to form the first mixed stream,

reducing a pressure of a second portion of the liquid stream to a pressure of the spent stream to form a lower pressure stream;

combining the lower pressure stream with the spent stream to form a mixed spent stream,

transferring thermal energy from the cooler external heat source stream to a first portion of a pre-heated, higher pressure, basic working fluid stream to form a first heated, higher pressure, basic working fluid stream and a spent external heat source stream;

transferring thermal energy from the mixed spent stream to a second portion of a pre-heated higher pressure, basic working fluid stream to form a second heated, higher pressure, basic working fluid stream and a cooled mixed spent stream;

separating the cooled mixed spent stream into a second vapor stream and a second liquid stream;

pressurizing a first portion of the second liquid stream to a pressure of the first and second heated, higher pressure basic working fluid streams to form a pressurized liquid stream;

separating the lower pressure stream into a third vapor stream and a third liquid stream,

combining the pressurized liquid stream with the third vapor stream to form a partially pressurized mixed stream,

pressurizing the pressurized mixed stream to a pressure of the first and second heated, higher pressure basic working fluid streams to form a pressurized stream;

combining the first heated, higher pressure basic working fluid streams, the second heated, higher pressure basic working fluid stream and the pressurized stream to form the combined stream;

combining a second portion of the second liquid stream with the second vapor stream to from a lower pressure, basic working fluid stream;

transferring thermal energy from the lower pressure, basic working fluid stream to a liquid higher pressure, basic working fluid stream to form the pre-heated, higher pressure, basic working fluid stream and a cooled, lower pressure, basic working fluid stream;

transferring thermal energy from the cooled, lower pressure, basic working fluid stream to an external coolant stream to from a spent coolant stream and a fully condensed, lower pressure, basic working fluid stream; and

pressurizing the fully condensed, lower pressure, basic working fluid stream to form the liquid higher pressure, basic working fluid stream.

15.(New) The method of claim 14, wherein the external heat source stream is a geothermal stream.

16.(New) The method of claim 14, wherein the external heat source stream is a geothermal stream.

17.(New) The method of claim 14, wherein the working fluid comprises a lower boiling point component fluid and a higher boiling point component.

18.(New) The method of claim 14, wherein working fluid comprises an ammonia-water mixture, a mixture of two or more hydrocarbons, a mixture of two or more freon, a mixture of hydrocarbons and freon,

19.(New) The method of claim 14, wherein working fluid comprises a mixture of water and ammonia.

20.(New) A method for implementing a thermodynamic cycle comprising the steps of:

transforming thermal energy from a fully vaporized stream into a usable energy form to produce a lower pressure, spent stream;

combining the spent stream with a lower pressure, liquid stream to form a lower pressure mixed stream,

transferring thermal energy from the lower pressure mixed stream to a first portion of a pre heated higher pressure, basic working fluid stream to form a cooled mixed lower pressure stream and a first heated, higher pressure, basic working fluid stream;

separating the cooled mixed lower pressure stream into a separated lower pressure vapor stream and a separated lower pressure liquid stream;

combining a first portion of the separated lower pressure liquid stream with the separated vapor stream to form a mixed lower pressure, basic working fluid stream,

transferring thermal energy from the mixed lower pressure, basic working fluid stream to a higher pressure, basic working fluid stream to form a pre-heated higher pressure, basic working fluid stream and a cooled mixed lower pressure, basic working fluid stream,

condensing the cooled mixed lower pressure, basic working fluid stream with an external cooling stream to form a fully condensed, lower pressure, basic working fluid stream,

pressuring the fully condensed, lower pressure, basic working fluid stream to form the higher pressure, basic working fluid stream,

transferring thermal energy from a thrice cooled external heat source stream to a second portion of the pre-heated, higher pressure, basic working fluid stream to form a second heated, higher pressure, basic working fluid stream and a spent external heat source stream,

combining the first and second heated, higher pressure, basic working fluid streams to form a combined heated, higher pressure, basic working fluid stream;

transferring thermal energy from a twice cooled external heat source stream to the combined heated, higher pressure, basic working fluid streams to form a hotter, higher pressure, basic working fluid stream and the thrice cooled external heat source stream;

combining a higher pressure, stream with the hotter, higher pressure, basic working fluid stream to form a mixed, higher pressure stream;

transferring thermal energy from a once cooled external heat source stream to the mixed, higher pressure stream to form the twice cooled external stream and a partially vaporized, higher pressure stream,

separating the partially vaporized, higher pressure stream into a higher pressure, vapor stream and a higher pressure, liquid stream;

transferring thermal energy from an external heat source stream to the higher pressure, vapor stream to form the once cooled external heat source stream and the fully vaporized stream,

reducing the pressure of the higher pressure, liquid stream to form a reduced pressure stream;

separating the reduced pressure stream into a reduced pressure, vapor stream and a reduced pressure, liquid stream,

reducing the pressure of the reduced pressure, liquid stream into the lower pressure, liquid stream,

pressuring a second portion of the separated lower pressure liquid stream a pressurized liquid stream,

combining the pressurized liquid stream with the reduced pressure, vapor stream to form an intermediate pressure, mixed stream, and

pressuring the intermediate pressure, mixed stream to form the higher pressure, stream.

21.(New) The method of claim 20, wherein the external heat source stream is a geothermal stream.

22.(New) The method of claim 20, wherein the external heat source stream is a geothermal stream.

23.(New) The method of claim 20, wherein the working fluid comprises a lower boiling point component fluid and a higher boiling point component.

24.(New) The method of claim 20, wherein working fluid comprises an ammonia-water mixture, a mixture of two or more hydrocarbons, a mixture of two or more freon, a mixture of hydrocarbons and freon,

25.(New) The method of claim 20, wherein working fluid comprises a mixture of water and ammonia.